

APPENDIX I
Staff Recommendations for Agricultural Order

BACKGROUND

**CENTRAL COAST REGIONAL
WATER QUALITY CONTROL BOARD**

March 2011





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State of California

Linda S. Adams, Secretary
California Environmental Protection Agency

State Water Resources Control Board
<http://www.waterboards.ca.gov/>

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A. Legal and Regulatory Requirements

Conditional Waiver of Waste Discharge Requirements

The current Order is a Conditional Waiver of Waste Discharge Requirements (2004 Conditional Waiver) that implements the Water Code and Basin Plan. Landowners and operators of irrigated agricultural operations where water is applied for producing commercial crops including land planted to row, vineyard, field and tree crops as well as commercial nurseries, nursery stock production and greenhouse operations with permeable floors that have the potential to discharge waste to waters of the State and do not currently discharge under a waiver or WDRs, must obtain regulatory coverage by enrolling as Dischargers under the 2004 Conditional Waiver.

A Conditional Waiver, described in more detail below, provides an alternative regulatory option to adoption of Waste Discharge Requirements (WDRs) for all individual Dischargers. Dischargers may seek coverage under the current 2004 Conditional Waiver through a tiered waiver structure. The 2004 Conditional Waiver specifies that some Dischargers may be immediately considered for WDRs because of a past history of violations or other problems of non-compliance. To date, the Water Board has not adopted individual WDRs for such Dischargers.

Approximately 1700 of 3000 farming operations¹ are enrolled in the 2004 Conditional Waiver, representing approximately 93% of the 435,000 acres of commercial irrigated agricultural lands in the Central Coast Region.

California Water Code

The California Water Code requires that the State Water Board or Regional Water Boards adopt water quality control plans (Basin Plans). A Basin Plan must identify the beneficial uses of State ground and surface waters, establish water quality objectives for the reasonable protection of the beneficial uses, and establish a program of implementation for achieving the water quality objectives.

Water Code section 13263 authorizes the State and Regional Water Boards to issue WDRs for projects or activities that discharge or propose to discharge waste to ground or surface waters within State boundaries.

Water Code section 13260 requires that:

“...any person discharging waste, or proposing to discharge waste that could affect the quality of the waters of the State, [to] file a report of discharge (an application for waste discharge requirements) along with a filing fee, in anticipation that the Regional Water Board will provide waste discharge requirements.”

¹ Based on Department of Pesticide Regulation (DPR) pesticide use data and county crop maps, staff estimates that there are approximately 3000 farming operations in the Central Coast Region.

In the event a discharger files a Report of Waste Discharge (ROWD), the Regional Water Board is obligated to prescribe WDRs except where the Water Board finds that a waiver of WDRs for a specific type of discharge is in the public interest. Water Code section 13269 allows the Regional Water Board to waive submission of ROWDs and/or issuance of WDRs. Conditional waivers of WDRs are limited to five years in duration, must be conditional, and may be terminated at any time by the Water Board. The Water Code requires that conditional waivers and WDRs be consistent with any applicable water quality control plan. A summary of CWC requirements for WDRs and Conditional Waivers is shown in Table 1.

Table 1. California Water Code Requirements for WDRs and Conditional Waivers

	WDR	Waiver
Implement any relevant water quality control plans that have been adopted [13263, 13269]	✓	✓
Take into consideration the beneficial uses to be protected—past, present, and probable future [13263(a)]	✓	
Consider the water quality objectives reasonably required to protect beneficial uses [13263(a)]	✓	
Consider other waste discharges [13263]	✓	
Consider the need to prevent nuisance [13263]	✓	
Estimate total costs of ag program and identify potential sources of financing [13141] (not required for WDRs or Waivers, but included in Appendix F for Board information)		
The action is in the public interest [13269]		✓
Monitoring to support the development and implementation of the program (may be waived where discharges do not pose a significant threat to water quality) [13269]		✓

Nonpoint-Source Policy

Water Code section 13369 required that the State Water Board develop a nonpoint-source implementation program that includes the following elements:

- non-regulatory implementation of best management practices (BMPs),
- regulatory-based incentives for BMPs, and
- the adoption and enforcement of WDRs that will require the implementation of BMPs.

The State Water Board's Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (NPS Policy) was adopted in May 2004 and provides guidance to the Regional Water Boards on how to develop, structure, and enforce a nonpoint-source pollution control implementation program, which fulfills the requirements of the Water Code.

Any nonpoint-source pollution control implementation program must comply with State or Regional Water Board WDRs, conditional waivers, and/or Basin Plan prohibitions. Such programs may be developed by the State or Regional Water Boards; an individual discharger; or by a coalition of dischargers in cooperation with a third-party representative, organization, or government agency.

The Regional Water Board has the primary responsibility for ensuring that an appropriate nonpoint-source pollution control implementation program is in place. Before approving a nonpoint-source pollution control implementation program, the Regional Water Board must find that the program will promote attainment of water quality objectives. The nonpoint-source program also must meet the requirements of the five key structural elements described below.

1. Implementation programs must, at a minimum, address NPS pollution in a manner that achieves and maintains water quality objectives and beneficial uses, including any applicable antidegradation requirements.
2. A nonpoint-source control implementation program must include a description of the management practices and other program elements that are expected to be implemented to ensure attainment of the implementation program's stated purpose, the process to be used to select or develop management practices, and the process to be used to ensure and verify proper management practice implementation.

The Regional Water Board must be able to determine that there is a high likelihood that the program will attain water quality objectives. This includes examining factors such as the level of discharger participation and the effectiveness of the management practices implemented.

3. Where the Regional Water Board determines it is necessary to allow time to achieve water quality objectives, the nonpoint-source pollution control implementation program must include a specific time schedule and corresponding quantifiable milestones designed to measure progress toward reaching the specified requirements.
4. An NPS pollution control implementation program must include sufficient feedback mechanisms so that the Regional Water Board, dischargers, and the public can determine whether the program is achieving its stated purpose, or whether additional or different management practices or other actions are required.
5. The Regional Water Board must make clear, in advance, the potential consequences for failure to achieve a nonpoint-source pollution control implementation program's stated objectives.

Waste discharges from irrigated agricultural operations are considered nonpoint-source discharges. Therefore, the requirements of the NPS Policy are applicable to the Draft Ag Order.

Central Coast Regional Water Quality Control Plans

Water Code section 13240 requires that the Regional Water Board formulate and adopt a water quality control plan, or Basin Plan, for all areas in the region.

The Basin Plan establishes beneficial uses to be protected in Central Coast Region's ground and surface waters (e.g., municipal supply, agricultural supply, warm and cold freshwater habitat, contact recreation); water quality objectives to protect the beneficial uses; and implementation plans to achieve the water quality objectives. The water quality objectives are established at a level to ensure the reasonable protection of beneficial uses in Central Coast ground and surface waters. For example, Basin Plans contain fecal coliform water quality objectives for any waters designated for contact recreation. The fecal coliform water quality objectives are designed to ensure the health and safety of people using waters for contact recreation.

All Water Board permits, WDRs, and waivers of WDRs must implement provisions of the Basin Plan. The Draft Ag Order therefore must (1) require that Central Coast ground and surface waters to which waste from irrigated agricultural operations is discharged must achieve applicable Basin Plan water quality objectives, and (2) be consistent with Basin Plan policies and implementation provisions, including time schedules, where applicable.

State Anti-Degradation Policy

State Water Board Resolution 68-16 *Statement of Policy with Respect to Maintaining High Quality of Waters in California* (Resolution 68-16) was adopted in October of 1968 to address high quality waters in the State. Title 40 of the Code of Federal Regulations, Section 131.12—Antidegradation Policy (40 CFR 131.12) was developed in 1975 to ensure water quality necessary to protect existing uses in waters of the United States. Resolution No. 68-16 applies to discharges to all high quality waters of the State, including groundwater and surface water (CWC Section 13050[e]); 40 CFR 131.12 applies only to surface waters.

Resolution 68-16 requires that:

1. *"Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies."*
2. *"Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained."*

Basin Plan water quality objectives are developed to ensure that ground and surface water beneficial uses are protected. The quality of some State ground and surface waters is higher than established Basin Plan water quality objectives. For example, nutrient levels in good quality waters may be very low, or not detectable, while existing water quality standards for nutrients may be much higher. In such waters, some degradation of water quality may occur without compromising protection of beneficial

uses. To comply with Resolution 68-16, the Water Board must require dischargers to implement best practical treatment or control methods to assure that the existing high quality water is maintained consistent with the maximum benefit to the people of the state and that the discharges do not cause pollution or nuisance. Pollution means that the receiving water exceeds the water quality objectives.

B. Agricultural Regulatory Program Implementation (2004 – 2009)

From the inception of the State Water Board Non-Point Source Program in 1988, and up to 2004, the Central Coast Water Board's emphasis in working with agriculture was on encouraging voluntary efforts and supporting such cooperative efforts as the Monterey Bay National Marine Sanctuary's Plan for Agriculture. The Water Board has also directed more than \$15 million dollars in grant funding from State of California Propositions 13, 40, 50, 84, and Clean Water Act section 319(H) NPS grant programs to Central Coast grantees for agricultural water quality grant projects. In addition, the Water Board directed an estimated \$10 million dollars of Pacific Gas and Electric (PG&E) and Guadalupe Settlement Funds toward agricultural water quality grants. The focus of these grant projects was to increase educational outreach through ranch and farm water quality management planning short courses, watershed-based monitoring, and implementation grants throughout the Central Coast Region.

In general, the Water Boards have had minimal direct contact with individual farmers and relied upon education, outreach, and voluntary technical assistance programs already in place, such as Farm Bureau watershed groups, Natural Resource Conservation Service (NRCS) and Resource Conservation District (RCD) programs and University of California Cooperative Extension (UCCE) Farm Water Quality short courses. Farmers have acknowledged that this approach primarily relies on self-determined compliance with water quality regulations through implementation of Farm Water Quality Management Plans (Farm Plans) and agricultural water quality education. With this approach, Water Boards could not measure and account for success in terms of reducing pollutant loading or achieving compliance with water quality objectives. For this reason, the State Water Board adopted the NPS Policy in May 2004, which requires NPS pollution control programs to take a more prescriptive regulatory approach, define water quality objectives, define management practices to address the water quality objectives, establish time schedules to achieve compliance, and include compliance verification monitoring, and enforcement.

2004 Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands

On July 9, 2004, the Water Board adopted Resolution No. R3-2004-0117 establishing a Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (2004 Conditional Waiver). The intent of the 2004 Conditional Waiver was to regulate discharges from irrigated lands to ensure that such discharges are not causing or contributing to exceedances of any Regional, State, or Federal numeric or narrative water quality standard (Finding #1, 2004 Conditional Waiver). The 2004 Conditional Waiver did not implement the State Water Board's 2004 NPS Policy because the policy was adopted only two months prior to Water Board action and the Water Board's 2004 Conditional Waiver effort had already been underway for two years.

In July 2009, the Water Board adopted Resolution No. R3-2009-0050 extending the terms and conditions of the 2004 Conditional Waiver for an additional year until July 10, 2010, to allow more time for development of revisions to and renewal of that Conditional Waiver with a more rigorous public comment process. In July 2010, the Water Board adopted Order No. R3-2010-0040 renewing the 2004 Conditional Waiver for an additional 8 months until March 31, 2011, to allow more time to develop a renewed Conditional Waiver.

As described in the 2004 Conditional Waiver and associated staff report to the Water Board for the July 2004 Water Board Meeting, initial requirements to regulate agricultural discharges and performance goals are identified in Table 2 below. In addition, at the December 2010 Water Board Meeting, interested persons provided comments, and Water Board Members, staff, and the public engaged in discussion regarding the effectiveness of the 2004 Conditional Waiver and areas for improvement.

Since adoption of the 2004 Conditional Waiver, the Water Board has implemented the Agricultural Regulatory Program to regulate discharges from irrigated agricultural lands that cause or threaten to cause impacts to water quality. From January 2005 to present, the Water Board received enrollment information from approximately 1719 of the estimated 3000 farming operations in the Central Coast region. Staff periodically conducted inspections to evaluate real and potential threats to water quality and also in response to complaints. Routine inspections by staff are not conducted for each irrigated agricultural operation and staff has conducted inspections at approximately 70 operations under the 2004 Conditional Waiver. Staff provided program status reports to the Water Board and State Water Board at numerous Water Board Meetings, including a detailed review of toxicity data in agricultural areas in May 2008 and a detailed review of nitrate impacts to groundwater in June 2009.

The 2004 Conditional Waiver raised awareness to some degree and helped bring about changes on some farms according to anecdotal observations. However, the 2004 Conditional Waiver lacks clarity regarding water quality requirements, does not include time schedules or milestones to achieve compliance with water quality standards, and does not include compliance and verification monitoring to measure progress towards water quality improvement.

At this time, more data and information are known about the scale and severity of the pollution in agricultural areas and the impacts to beneficial uses, including drinking water compared to 2004. Current data indicate that agricultural discharges continue to load pollutants to waters of the State and impact water quality and beneficial uses. This additional information compels a greater sense of urgency and accountability for the Water Board to protect water quality and better regulate agricultural discharges that cause or threaten to cause pollution to waters of the State.

Table 2. 2004 Conditional Waiver Requirements, Performance Goals and Outcomes

REQUIREMENT	GENERAL PURPOSE	PERFORMANCE GOALS ¹	PERFORMANCE OUTCOMES ²
ENROLLMENT	Requires individual Dischargers to enroll in the 2004 Conditional Waiver.	Jan. 2005 – Minimum of 50% of Dischargers are enrolled. Jul. 2005 – Minimum of 80% of Dischargers are enrolled.	Enrollment – 1719 out of approx. 3000 Dischargers (57%) enrolled, representing approximately 93 % of the Central Coast Region's total irrigated agricultural acreage. More detailed review of enrollment data suggests that there are significant gaps in enrollment in impaired areas.
EDUCATION	Requires a minimum of 15 hours of education to assist dischargers in making informed decisions necessary to protect water quality and comply with the 2004 Conditional Waiver.		Education - 1300 Dischargers (43%) in compliance, representing more than 18,000 hours of completed education.
FARM PLAN	Requires the development of a Farm Plan that addresses, at a minimum, irrigation management, nutrient management, pesticide management and erosion control. Requires the implementation of management practices to protect water quality and documentation in Notice of Intent and practice checklists.	Jul. 2006 – Dischargers will implement management practices on a minimum of 50% of irrigated agriculture acres. Jul. 2009 – Dischargers will implement management practices on a minimum of 80% of irrigated agriculture acres.	Farm Plan – 1528 Dischargers (50%) report having a Farm Plan. Monitoring and reporting insufficient to determine the extent of management practice implementation as a performance outcome.
MONITORING	Requires individual water quality monitoring or participation in cooperative water quality monitoring to verify the adequacy and effectiveness of requirements and detect improvements in water quality due to changes in management practices within the time frame of the waiver.	Jul. 2005 – Minimum of 50% of Dischargers are enrolled in the cooperative monitoring program	Individual Monitoring - Fifteen Disch. have elected individual monitoring. No individual monitoring reports have been submitted and all fifteen are out of compliance. Cooperative Monitoring – 1677 (56%) Disch. have elected cooperative monitoring. 368 Disch. have not paid fees, totaling more than \$220,000 and are out of compliance.

<p style="text-align: center;">WATER QUALITY STANDARDS</p>	<p>Requires compliance with Basin Plan and water quality standards</p>	<p style="text-align: center;">----</p>	<p>Exceedance of water quality standards in surface water and groundwater.</p> <p>Monitoring and reporting insufficient to determine compliance.</p>
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¹ – Performance goals identified in the staff report for the 2004 Conditional Waiver presented at the July 2004 Water Board Meeting.

² – Performance outcomes achieved as of April 2010.

C. Monitoring and Reporting

The 2004 Conditional Waiver includes the option for watershed scale, surface water monitoring, which has shown significant, widespread pollution problems and some indications of improvement in certain areas, but has not identified any individual discharges that are polluting so that they can be corrected. The 2004 Conditional Waiver did generally specify time for compliance and specified that increased reporting and monitoring may be required in order to ensure that water quality is improving (Finding 16, 2004 Conditional Waiver). The Water Board did not increase monitoring and reporting requirements during the first five years of the 2004 Conditional Waiver. The monitoring and reporting program for the 2004 Conditional Waiver is discussed further in Section 4.D. along with other options considered for the 2011 Draft Conditional Waiver.

D. Enforcement and Implementation

The State Water Board's 2009 Water Quality Enforcement Policy (Enforcement Policy) describes how the State and Regional Water Boards will conduct enforcement activities. The Porter-Cologne Act (Wat. Code Div. 7) grants the State and Regional Water Boards the authority to implement and enforce water quality laws, regulations, policies, and plans to protect groundwater and surface waters of the State.

The goal of the Enforcement Policy is to protect and enhance the quality of the waters of the State by defining an enforcement process that addresses water quality problems in the most efficient, effective, and consistent manner.

The Enforcement Policy states that a good enforcement program relies on well-developed compliance monitoring systems designed to identify and correct violations, help establish an enforcement presence, collect evidence needed to support enforcement actions where there are identified violations, and help target and rank enforcement priorities. Compliance with regulations is critical to protecting public health and the environment. The Enforcement Policy aims to ensure that the most effective and timely methods be used to ensure that the regulated community stays in compliance. The Enforcement Policy also states that tools such as providing assistance, training, guidance, and incentives are commonly used by the Water Boards and work very well in many situations; however, there is a point at which this cooperative approach should make way for a more forceful approach.

Enforcement is a critical element in creating the deterrence needed to encourage the regulated community to anticipate, identify, and correct violations. Appropriate penalties and other consequences for violations offer some assurance of equity between those

who choose to comply with requirements and those who violate them. It also improves public confidence when government is ready, willing, and able to back up its requirements with action.

The Enforcement Policy requires that the Water Boards strive to be fair, firm, and consistent in taking enforcement actions. This includes ensuring the fair treatment of people of all races, cultures, and income levels, including minority and low-income populations, consistent with the goals in California Environmental Protection Agency's (Cal-EPA's) Intra-Agency Environmental Justice Strategy, August 2004.

Enforcement of the 2004 Conditional Waiver

Since the initiation of the 2004 Conditional Waiver in July 2004, the Water Board has taken approximately 815 enforcement actions, (810 notices of violation and five administrative civil liability orders) representing the highest number of enforcement actions taken by any Regional Board related to discharges from irrigated lands. Additionally, the Water Board has issued 1383 Water Code Section 13267 orders.

Initial enforcement actions focused primarily on failure to enroll under the 2004 Conditional Waiver and failure to comply with monitoring program requirements (e.g., failure to pay monitoring fees). Staff is currently re-evaluating enforcement priorities to ensure compliance with the 2004 Conditional Waiver in areas with the most severe surface water and groundwater pollution and on agricultural operations that pose the highest risk to water quality (e.g., tailwater discharge volume, nitrate hazard index, use of pesticides known to cause toxicity).

Enrollment -

Dischargers seeking authorization to discharge under the 2004 Conditional Waiver must submit a completed notice of intent (NOI) to comply with the terms of the 2004 Conditional Waiver. As reported at the May 12, 2010 agricultural workshop, 1719 out of approximately 3000 (57%) Dischargers have enrolled in the 2004 Conditional Waiver—representing approximately 93% of the Central Coast Region's total irrigated agricultural acreage. Currently, staff is focusing on improving efforts to conduct more timely and efficient enforcement on landowners and growers who fail to enroll in the 2004 Conditional Waiver.

Farming and agricultural operations on the Central Coast are constantly in a state of flux. Farming operations move around, frequently acquiring and dropping individual ranches. In addition, production on individual ranches changes over time—one year a ranch may be in active production, and the following year it may be inactive. Individual operators also transition between different farming operations. Thus, it is not practical to measure or expect 100% enrollment in all areas and it is not efficient or effective to pursue enforcement of every single non-filer. As a priority, staff is evaluating enrollment and pursuing related enforcement in priority areas. Current information indicates that there are significant gaps in enrollment in areas with the most severe water quality problems and adjacent to impaired waterbodies. In addition, staff has revised the Notice of Intent to Enroll (NOI) and is working to improve the collection and management of enrollment data. The revised NOI ensures better and more consistent information gathering related to landownership. In addition, staff is making it a program rule to include the landowner on any enforcement correspondence. In cases where the landowner is unknown, staff

will include a requirement to identify landowner as part of Water Code section 13267 orders.

Monitoring Requirements -

The 2004 Conditional Waiver requires Dischargers to conduct individual water quality monitoring or participate in cooperative water quality monitoring. Preservation, Inc. is a non-profit organization that manages the Cooperative Monitoring Program (CMP) on behalf of irrigated agriculture throughout the Central Coast Region. Preservation, Inc. represents agricultural Dischargers and is directed by an agricultural committee established by the grower community to represent agricultural interests.

Fifteen Dischargers have elected individual monitoring. None of these 15 Dischargers have submitted individual monitoring reports and all fifteen are out of compliance. In addition, as of May 2010, approximately 1677 Dischargers have elected to participate in cooperative monitoring and 368 Dischargers have not paid fees (totaling more than \$220,000) and are out of compliance with monitoring requirements.

Implementation of the 2004 Conditional Waiver

Staff is evaluating compliance and progress in watersheds and areas with most severe water quality problems by reviewing water quality data, evaluating chemical use, inspecting farms and ranches, and conducting outreach. Staff prioritizes individual farms or ranches that are or may be discharging in violation of water quality laws so staff can notify the owners and operators and encourage them to implement practices to reduce the discharges and to improve compliance with the 2004 Conditional Waiver.

Most recently, staff issued Water Code Section 13267 orders to several agricultural operations in response to exceedances of the nitrate drinking water standard in groundwater in the San Jerardo area of the Salinas Valley. A likely major source of the pollution is fertilizers used in agricultural production. The Executive Officer issued Water Code section 13267 orders requiring the growers to submit information regarding nitrate concentrations in groundwater wells, the installation and maintenance of well backflow protection devices, and nutrient management practices.

E. Summary of Water Quality Improvement Efforts Implemented by Farmers

Many farmers have adapted and will continue to adapt their farming operations to address pollution and better protect water quality.

In 2006, the Water Board conducted a survey of management practices being implemented by agriculturalists. The results of that survey are documented in the "2006 Management Practice Checklist Update Summary Report" released June 2007. The report focused on several management areas. Three of these areas, pesticide management, riparian management, and nutrient management are summarized below.

For pesticides, approximately 78% of the growers (807 operations) consider runoff or leaching potential of the chemical applied. Similarly, 81% of growers (844) consider toxicity to non-target organisms with pesticide selection. This represents approximately 256,520 acres that actively consider pesticide management practices.

The survey documents that 52% (545 growers) implement vegetative buffers between cropped areas, along the lower edge of the farm, and along roadways. Of these growers, 405 establish and maintain riparian buffers where streams cross or border property. This suggests that a portion of the drainage from approximately 130,000 acres may flow through vegetated areas prior to entering waters of the state.

Growers implement a variety of practices related to nutrient management. Most of these practices are focused on the crop nutrient requirements. Approximately 67% of the growers (701) know crop nutrient requirements and nutrient budgets are established and recorded. About 49% of the growers (513) test irrigation water for nitrogen content and information is incorporated into fertilization program. Similarly, 58% of the growers (601 growers) test soil for residual nitrogen and information is incorporated into fertilization program. Overall growers are implementing management practices on approximately 225,000 acres that have the potential to influence nutrient movement into surface and ground waters.

F. Efforts to Renew the Agricultural Conditional Waiver

Staff initiated development of a renewed Conditional Waiver in 2008. In a December 2008 letter, the Water Board invited key stakeholders to participate on the Agricultural Advisory Panel (Ag Panel) to recommend conditions for a renewed Conditional Waiver. Participants on the Ag Panel represented agricultural and environmental organizations that had participated in the development of the 2004 Conditional Waiver. To resolve water quality impairments associated with irrigated agriculture and comply with minimum statutory requirements, Ag Panel representatives were specifically invited to make recommendations regarding milestones, targets, and schedules for achieving water quality standards and protecting beneficial uses, using a table format. See Table 3.

Between January and September 2009, the Ag Panel met five times as a group and three times without Water Board staff to discuss agricultural water quality issues and potential conditions. Despite discussions, the Ag Panel did not produce recommendations to staff for a renewed Conditional Waiver (although many ideas came out of the meetings, including some with considerable support, like the tailwater elimination/reduction ideas mentioned above and a strawman monitoring proposal). At the Ag Panel meeting on September 22, 2009, several panel members suggested that the forum and process were no longer productive for developing recommendations for renewing the Agricultural Conditional Waiver. The Ag Panel requested that staff take the first step in producing a preliminary Draft Conditional Waiver to provide panel members and other interested persons insight into staff's considerations for draft conditions, and opportunity to comment on a draft.

At the October 2009 Water Board meeting, staff updated the Water Board of this development and Board members requested that staff present a revised public input process to the Water Board and interested persons at the December 2009 meeting.

At the December 2009 Water Board meeting, the Water Board directed staff to release preliminary draft staff recommendations for an updated Agricultural Conditional Waiver by February 1, 2010, and to provide the public with an opportunity to review, comment, and recommend alternatives for regulating agricultural discharges. On February 1, 2010, staff released the preliminary draft staff recommendations for a renewed Conditional Waiver, opened up a 60-day informal public comment period, and scheduled

the May 12, 2010 Board Workshop to discuss public comments and alternatives regarding the preliminary draft Agricultural Conditional Waiver. In response, the Water Board received more than 1200 comment letters from interested persons, including three alternatives submitted by the California Farm Bureau Federation, OSR Enterprises, Inc. and the Monterey Coastkeeper (and affiliated environmental groups).

As indicated in the February 1, 2010 preliminary draft staff recommendations, the Water Board planned to review and consider all alternatives submitted for consistency with: 1) the program goals of resolving surface and groundwater water quality impairments and impacts to aquatic habitat over a reasonable time frame, including milestones, and monitoring and reporting to verify compliance and measure progress over time; and 2) minimum statutory requirements (including Water Code Sections 13263 and 13269 and relevant plans, policies, and regulations identified in Attachment A to the preliminary draft Agricultural Conditional Waiver). Staff also planned to consider the alternatives and comments received in revising the preliminary draft staff recommendations and preparing the Draft Conditional Waiver for Water Board consideration.

Following the release of the draft report and supporting documents and continuing through September 2010, Water Board staff participated in several outreach meetings and events. To ensure a diverse representation of stakeholders, staff initially made a deliberate effort to engage stakeholders who were not represented on the Ag Panel and who were not already actively participating in the process to renew the Conditional Waiver, including technical assistance providers, municipalities, environmental justice organizations, and agricultural industry groups not yet involved. In addition to discussing potential conditions and alternatives, staff met with stakeholders to discuss water quality conditions and priorities, methods to outreach to underrepresented groups, technical considerations associated with achieving water quality standards, potential costs of compliance to agriculture and potential costs to communities impacted by agriculture. Staff also met specifically with representatives from agriculture and specific commodity groups.

At the May 12, 2010 Board Workshop, the Water Board agreed to continue the Workshop in July in the northern part of the region to create an opportunity to address the Water Board for those members of the public who did not attend the May Workshop. On Thursday, July 8, 2010 the Water Board held a public workshop in Watsonville continuing the May 12 public workshop. Staff received 16 additional comment letters. These comments generally covered issues similar to the comments submitted prior to the May 12 Water Board Workshop.

Staff worked on revising the preliminary draft staff recommendations and preparing the 2011 Draft Conditional Waiver while meeting with stakeholders from February through September 2010.

Table 3: Table of Agricultural Conditional Waiver Requirements¹

Authority	Legal Requirement	Confirmation of Compliance (monitoring/reporting)	Point of Compliance	Milestone(s) to Measure Progress	Time to Compliance
Porter-Cologne, Basin Plan	Eliminate toxic discharges of agricultural pesticides to surface waters and groundwater				
Porter-Cologne, Basin Plan	Reduce nutrient discharges to surface waters to meet nutrient standards				
Porter-Cologne, Basin Plan	Reduce nutrient discharges to groundwater to meet groundwater standards				
Porter-Cologne, Basin Plan	Minimize sediment discharges from agricultural lands				
Porter-Cologne, Basin Plan	Protect aquatic habitat				

1. Developed to frame input from Ag Panel Members and other stakeholders on the Agricultural Conditional Waiver.

G. February 2010 Preliminary Draft Agricultural Order

Staff developed the preliminary recommendations for an Agricultural Order by building upon the 2004 Conditional Waiver to advance efforts to improve agricultural water quality and gain compliance with applicable water quality standards. Thus, staff recommended the same regulatory tool, a Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands, to regulate agricultural waste discharges. To ensure understanding of applicable water quality standards, staff included explicit clarification of water quality waste discharge and compliance requirements. In addition, to improve implementation actions directly addressing the specific priority water quality issues, the Preliminary Draft Agricultural Order built upon the development and implementation of Farm Plans, including effective implementation of management practices (related to irrigation, nutrient, pesticide and sediment management) that will most likely yield the greatest amount of water quality protection. The Preliminary Draft Agricultural Order also built upon the existing Cooperative Monitoring Program by retaining watershed-scale, receiving water monitoring, but added individual monitoring and reporting to improve Staff's ability to identify specific waste discharges loading pollutants or contributing to affects, verify compliance with the requirements by dischargers and measure progress over time at the farm and watershed scales. The Preliminary Draft Agricultural Order focused on reducing or eliminating agricultural waste discharges – especially contaminated irrigation runoff and percolation to groundwater in the most severely impaired areas. Due to the unique conditions related to irrigated lands and individual farming operations, the Preliminary Draft Agricultural Order included multiple options for compliance to maximize Dischargers' flexibility in achieving desired water quality improvement according to a specific time schedule and specific milestones. Similar to the 2004 Conditional Waiver, the Preliminary Draft Agricultural Order also included significantly reduced monitoring and reporting requirements for those agricultural waste discharges identified as having relatively low-risk for water quality impairment. The conditions for compliance, the monitoring and reporting requirements and the time schedule for compliance are summarized in the following paragraphs.

Compliance Requirements

The Preliminary Draft Agricultural Order included the following requirements for dischargers to demonstrate compliance:

- Enroll to be covered by the Order
- Develop and implement a farm plan that includes management practices with certain conditions and specifications
- Eliminate non-storm water discharges, or use source control or treatment such that non-storm water discharges meet water quality standards
- Demonstrate through water quality monitoring that individual discharges meet certain basic water quality targets (that are or indicate water quality standards that protect beneficial uses). For example, non-storm water discharge monitoring should find:
 - No toxicity
 - Nitrate \leq 10 mg/L NO₃ (N)
 - Turbidity \leq 25 NTUs

- Un-ionized Ammonia < 0.025 mg/L (N)
- Temperature ≤ 68°F
- Demonstrate through water quality monitoring that receiving water is trending toward water quality standards that protect beneficial uses or is being maintained at existing levels for high quality water
- Farm operation must support a functional riparian system and associated beneficial uses (e.g., recreational uses like swimming, wading, or kayaking, fishing, wildlife habitat, etc.)

Monitoring and Reporting

Monitoring requirements were designed to support the implementation of the Preliminary Draft Agricultural Order (specifically as a Conditional Waiver of Waste Discharges). Monitoring must verify the adequacy and effectiveness of the Order's conditions. Monitoring information and data must be reported to the Water Board. The reporting requirements that staff recommended with the Preliminary Draft Agricultural Order included all farm operations to report on management practice implementation at the time of enrollment, to report on management practices at least once during the period of the Order, to update their farm plans annually with monitoring and site evaluation results, and to update their plans annually with specific adjustments in response to any results that indicate unacceptable progress (e.g., do not meet interim milestones set forth in the Order).

The current monitoring program for the 2004 Conditional Waiver uses a third party for meeting all monitoring and reporting requirements (Preservation, Inc., the nonprofit organization that implements the Cooperative Monitoring Program). Under the current monitoring and reporting program, Dischargers are responsible for monitoring and reporting either individually or collectively, and they must comply with the requirements of the Board-approved Monitoring and Reporting Program. The preliminary draft monitoring and reporting requirements provided for Dischargers to continue to use a third party as long as the third party is approved by the Executive Officer.

The existing monitoring program does not collect sufficient information regarding:

- Groundwater quality
- Pollution source identification
- Individual compliance
- Terrestrial riparian conditions

In the Preliminary Draft Agricultural Order, Staff recommended a monitoring program that required four categories of monitoring: Individual Discharge Characterization Monitoring, Individual Discharge Monitoring, Watershed (receiving water) Monitoring, and Additional Monitoring if required by the Executive Officer (receiving water and/or discharge).

Staff recommended this monitoring program because it:

- Addresses all surface water (tailwater, tile drain water, stormwater, etc) and groundwater
- Provides complete identification of individual operations responsible for waste discharge

- Allows for immediate management of known waste discharges with the potential to affect water quality
- Limits costs for farms that are in compliance
- Prioritizes further regulatory action on farms that are not progressing toward compliance
- Uniformly distributes costs for trend and stormwater monitoring across all growers resulting in similar costs for all growers based on acreage farmed
- Provides data for surface and groundwater trends, individual compliance, management practice implementation, riparian protection, and stormwater
- Allows data collection, analysis, and reporting to be performed by a non-regulatory single third party
- Provides follow up monitoring to identify and mitigate known waste discharges with the potential to affect water quality

Proposed Time Schedule for Compliance

Staff considered a time schedule that would support timely and effective implementation. Under this Preliminary Draft Agricultural Order, either irrigation runoff would need to be eliminated within two years of adoption of the Order or the following pollutants in irrigation runoff would need to be eliminated and/or treated or controlled to meet applicable water quality standards by the dates specified:

- Toxicity – within two years of adoption of the Order
- Turbidity – within three years of adoption of the Order
- Nutrients – within four years of adoption of the Order
- Salts – within four years of adoption of the Order

Additionally, dischargers must implement management practices to reduce pollutant loading to groundwater.

Staff recommended the time-schedule in this Preliminary Draft Agricultural Order as a reasonable starting point to improve water quality. This schedule acknowledges that to fully control all waste discharges and achieve compliance will take longer than the five years of this Preliminary Draft Agricultural Order. In a separate, but related effort regarding regulation of agricultural waste discharges, staff is evaluating and developing a time schedule for actions and to meet interim milestones that extends out to 2025.